

# Treasury Broadsheet

Snippets and stories from the world of  
treasury management by PwC Treasury  
Advisory

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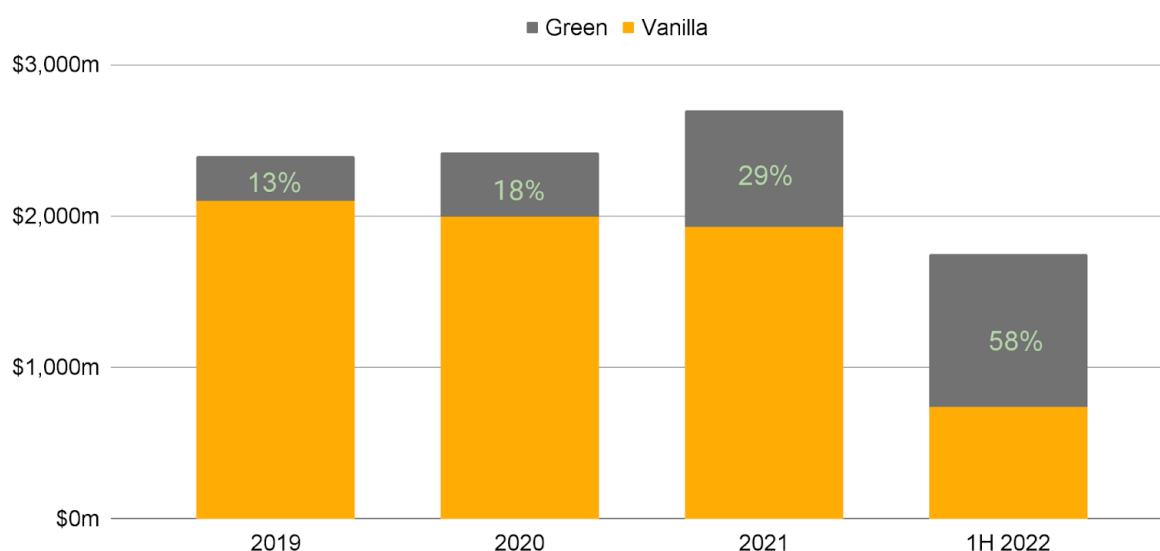
# It's not easy being green: Supply and demand imbalances in New Zealand's green bond market

A prevailing theme in New Zealand's domestic corporate bond market over the past several years, and one which was especially prevalent in the first half of 2022, has been the large increase in the supply of environmental, social and governance (ESG) or sustainability-linked bonds. Indeed, of the \$1.8 billion of new bond issuance across the first six months of 2022, more than \$1.0 billion (58%) was 'green'.

Of additional note, Contact Energy Limited issued a further \$250m of green bonds in September, further enhancing the hard turn to green this year.

**New Zealand corporate bond issuance - volumes and green bonds as a percentage of total**

Source: Bloomberg

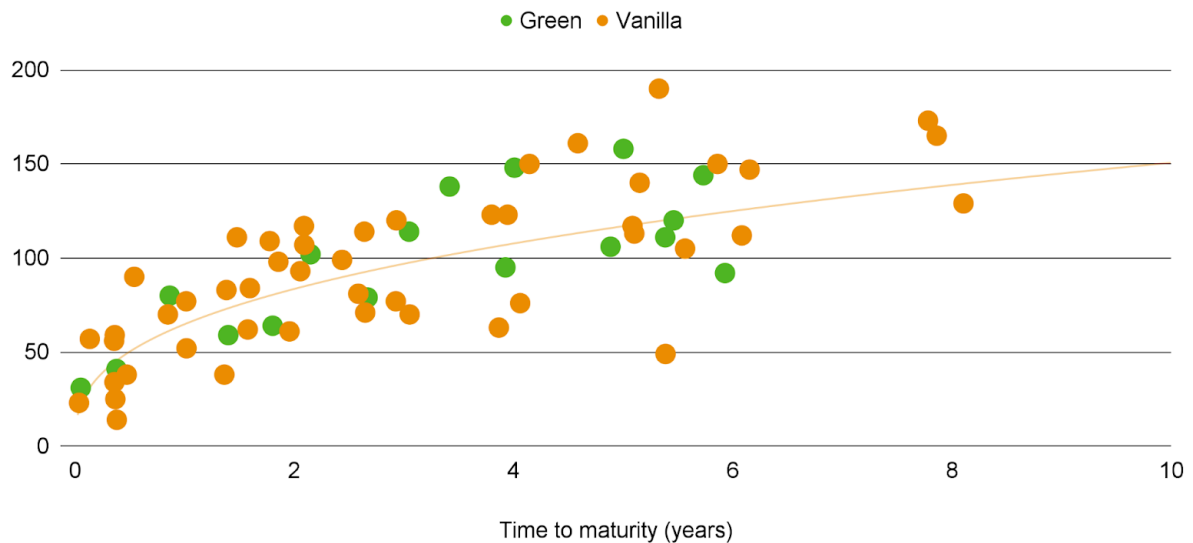


Interestingly however, there does not seem to be much concrete evidence of a corresponding increase in demand for green bonds from either the retail or wholesale investor base.

We analysed secondary market pricing relating to a selection of 65 bonds from 24 New Zealand corporate issuers. From a purely *price* perspective, there continues to be no immediately evident or material pricing benefit for green over vanilla bonds, acknowledging of course that there are other relevant terms and conditions which influence pricing. We summarise this analysis in the chart below:

### Credit spread of new corporate bond issuance (bps)

Source: PwC, Bloomberg



Mercury NZ Limited, New Zealand's largest corporate issuer of green products, having issued \$750m across five green-bond deals, endorsed this view, telling KangaNews that:

*"Our sense is that there is not significant additional demand, or a 'greenium', for labelled product at the moment."*

An underlying reason for this observation, and an issue affecting the New Zealand credit market more broadly, is the lack of high-quality, corporate, fixed-income products. This issue is made particularly acute by the continued growth of KiwiSaver assets under management, which has created a wider supply-demand imbalance in local credit markets. As a result, it is reasonable to conclude that the majority of investors are not in a position to make a meaningful pricing distinction between green and vanilla bonds.

It is clear from the surge in supply, however, that corporate issuers are motivated to bring green bonds to market, even if there does not appear to be a direct benefit in the form of additional demand or a comparative improvement in pricing.

Optimistically, this would be a reflection of these companies' desire to align their financing with their broader corporate sustainability goals. The idea being that, while these bonds may result in cost or liquidity advantages over time, these borrowers believe it is the right strategic approach even before such incentives emerge and that the pool of available investors is generally larger for these issues - marginally reducing execution risks. Going through the process of labelling a deal as 'green' is sufficiently onerous that an issuer will have genuinely enhanced its overall sustainability profile as a result.

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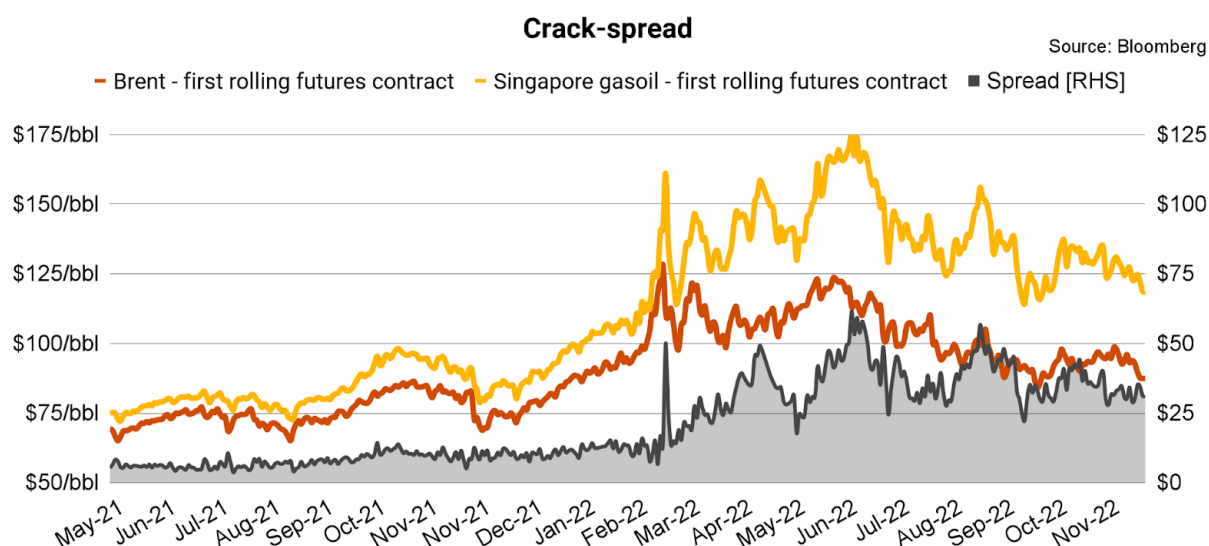


# Fuel hedging - cracking on

Crude oil prices have endured a rollercoaster ride across 2022. The Russian invasion of Ukraine in late February was the catalyst for much of the upward-skewed volatility, prompting an initially vicious ebbing and flowing of global supply concerns and broader risk-off sentiment that sent Brent barrel prices beyond US\$130. From mid-year, the impact of a strengthening US dollar (making oil more expensive in local currency terms for importing nations) and growing expectations of a looming global economic slowdown contributed to a demand-led easing of price pressures. China's continued adherence over the past year to a 'zero-Covid' policy, as much of the world transitioned into 'Covid acceptance', further served to suppress crude oil prices through reduced demand. Interestingly, China's approach to Covid, while weighing upon crude prices, has also assisted in an elevation of refined oil products. The difference between crude and refined is referred to as the 'crack spread'.

China represents approximately 20% of global oil refining capability. With the restrictions on movement and work activities, which are a core component of the 'zero-Covid' strategy, acting as a refining capacity crimp, global supply of usable oil products took a hit. Supply and demand dynamics came into play, widening the crack spread. China's Covid response was not the only driver of a widening of the 'crack spread', but it was a material contributor.

From an historical perspective, the 'crack spread' derived from the relative prices of Brent crude and Singapore Gasoil (a proxy for diesel) seldom exceeded US\$10/bbl. Since April, the spread has struggled to maintain a level below US\$30/bbl. Textbook economics suggests an historically wide spread should encourage the market to generate additional refining capacity, pressuring the spread back toward historical levels. Unfortunately, the market is not in a position to immediately provide increased capacity.



Covid may be an increasingly distant memory domestically, but its presence lingers for those with direct and material exposure to refined oil products. Traditional approaches to fuel hedging may require tweaking to ensure sufficient adaptation to the currently cracked environment.

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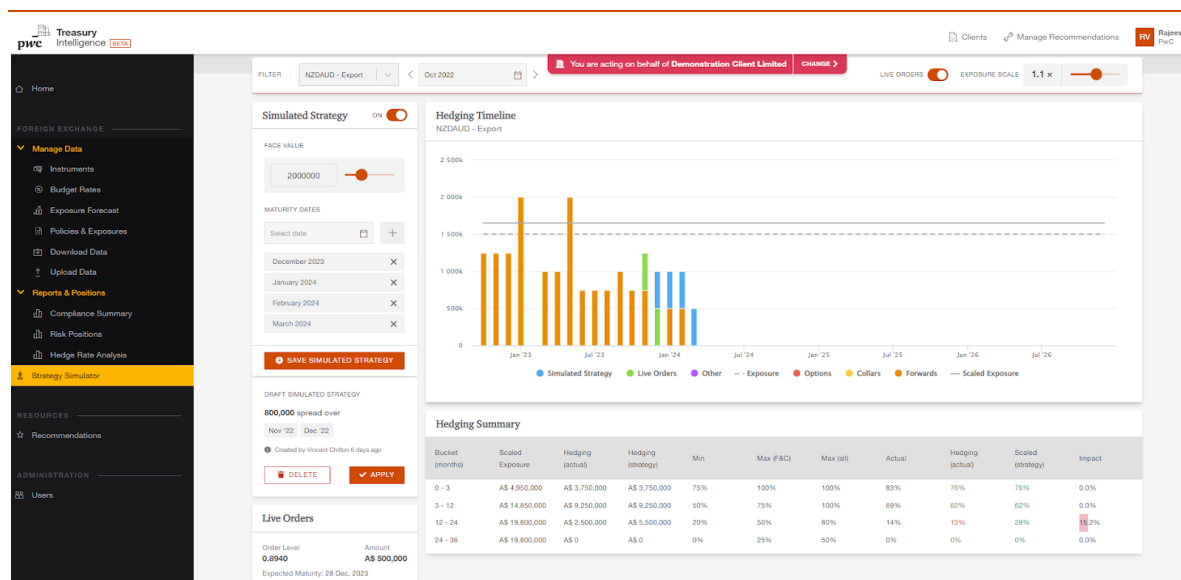
# The EACT Survey 2022 - What's on Corporate Treasurers' minds?

Three hundred treasury professionals responded to the 2022 European Association of Corporate Treasurers (EACT) survey. The survey, which aims to gauge the key priorities, challenges, and opportunities for corporate treasurers, took place during a period of heightened uncertainty with renewed geopolitical and economic tensions. Against this unique backdrop, the results of the survey provide an interesting snapshot of priorities during the challenging and evolving post-Covid recovery environment.


Cashflow forecasting and treasury digitisation were identified as the two matters of greatest importance for Corporate Treasurers, followed closely by risk management and banking relationships. These concerns come as no surprise given the challenges the current environment poses. Supply constraints, escalating geopolitical tensions and a global economic slowdown have made it difficult for Treasurers to have certainty over forecasts. Now more than ever, Treasurers are looking to optimise efficiency and to gain access to accurate, real-time, information on which to make informed strategic decisions. In fact, survey respondents indicated that access to enhanced data analytics, in support of decision making processes, was rapidly growing in importance.

Recognising the emergence of this trend several years ago, the PwC Treasury Advisory team developed a suite of tools to provide users with access to real-time visibility of their treasury risk positions and the ability to manage and report on those positions. The tools, in their current form, are easily accessible on all devices through the secured Microsoft Power BI application.

The next major evolution of the suite of tools will arrive in the coming months with the launch of Treasury Intelligence. Focusing initially on foreign exchange risks and accessible through a secure web app, Treasury Intelligence provides an easy to understand visual representation of risk positions, with the ability to run forward-looking risk management scenarios. An example of its functionality is noted below.



<sup>1</sup> Source: PwC NZ Treasury Intelligence



Among the many enhancements, Treasury Intelligence employs 'React Charts' to display the visuals, allowing the user the flexibility to toggle on and off features on the graph and can be tailored to the Treasurer's specific needs. Data integrity is another key benefit as Treasury Intelligence, the platform removing the need for complex spreadsheets by running processing and analytics in a secured SQL database, thereby reducing 'fat-finger' errors, and preventing the editing and potential hardcoding of formulas.

The Covid-19 pandemic has accelerated the trend of businesses introducing digital innovations to assist their treasury teams in the management of day-to-day operations. Access to real-time data to facilitate timely, informed, strategic decision making has been a key justification for investment in digital enhancements. However, as important as it is to have real-time access to data, the ability to report that data in a clear, concise and structured manner is equally important. Accurate and timely treasury reporting through the Treasury Intelligence platform leverages digital efficiencies to reduce the volume of information being handled and streamlining the month-end management and Board reporting processes.

The adoption of technology to complete routine tasks more efficiently within the treasury function is also emerging as a clear trend. One example is the increased use of application programming interfaces (API's) to better integrate data across platforms. The EACT survey also outlined the greater use of artificial intelligence (AI) and Robotic Process Automation (RPA) to complete repetitive tasks and to increase accuracy of data and forecasts. We expect the trend of businesses adopting new digital solutions to continue to gain momentum. Businesses should investigate the use of APIs and consider how they can be integrated with banking data, treasury management systems and enterprise resource planning (ERP) software. Treasurers should also consider the use of value-adding reporting tools to provide management with real-time access to data, thus supporting timely strategic decision making. **If you would like to learn more about Treasury Intelligence, we would be happy to arrange a time for a demonstration.**

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# Managing operational treasury risks in a work-from-home world

The core function of a fit-for-purpose Treasury Policy is to identify and define treasury-related risks and provide a framework to manage those risks. Arguably one of the least transparent treasury risks within an organisation are those related to operational aspects. Across the past two and a half years, many businesses adapted aspects of operational procedures to reflect the realities of working-from-home (WFH) environments. With the COVID-19 fog clearing and the WFH concept having seemingly permanently shifted from niche to mainstream, operational policies, and more specifically operational procedures and documentation, may no longer tick the fit-for-purpose-box.

Operational risk is generally defined as the risk of financial and/or reputation loss as a result of human error (or fraud), negligent behaviour, system failures and inadequate procedures and controls. The objective of operational risk management, implemented through policy-defined controls and structured procedures, is to safeguard the financial resources and assets of the company through disciplined and controlled transacting and back-office operations.

From a fraud perspective, the risks are highlighted by the recently released PwC Global Economic Crime and Fraud Survey. This year's edition of the survey enquired about organisations' attitudes towards economic crime in the current environment. It drew responses from 2,319 executives across 53 countries and regions, including New Zealand.

- 71% of global respondents experienced an increased risk of fraud, corruption, or other financial crime as a result of the disruption caused by the COVID-19 pandemic.
- 51% of global respondents cited an increase of conduct fraud, particularly customer, supply chain, procurement, and human resources fraud.

An overview of the 2022 PwC Global Economic Crime and Fraud Survey can be found [here](#).

Beyond outright fraudulent actions, operational procedures that have been flexed to support staff working remotely may heighten the potential for financial and/or reputational loss through genuine human error, especially in instances where the people performing specific roles change and modified processes may not accurately reflect those described in procedure manuals and documentation. This risk may be heightened in smaller organisations where separation of duties faced practical limitations long before WFH became normalised.

Unintentional operational negligence, coupled with intentionally fraudulent actions within a counterparty, compound the risks to an organisation.

The operational risk framework and objectives of the Treasury Policy may not require material reworking. However, documented processes and procedures employed to manage risk within the framework that have been modified should be subject to a more stringent review. Organisations should challenge the operational risk controls - testing and where necessary, refining and reimplementing.

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# Proposed changes to the New Zealand Emissions Trading Scheme

The Climate Change Commission (CCC) has proposed substantial changes to the pricing mechanics of New Zealand Carbon Units (NZU's). The proposal was released ahead of the government's annual consultation of the New Zealand Emissions Trading Scheme (ETS) which sought feedback on NZU price settings with a view to ensuring mechanics are aligned with current emissions reduction targets. The consultation concluded on 6 October and the outputs of the process, alongside the CCC recommendations, will likely be addressed by the government ahead of the next quarterly auction in December. Although adoption of the CCC recommendations, should it occur, will not be enforced until the first auction in 2023, any change has the potential to significantly influence the price of NZU's at the December auction and in the secondary market.

The government has set emission reduction targets and budgets to ensure that New Zealand works towards the 'net neutral by 2050' goal, a target established through the Zero Carbon Act. The New Zealand ETS market essentially acts as the bridge between these targets and the economy, applying financial responsibility to liable entities. The CCC views current market price mechanics as overly incentivising the use of forestry as a carbon sink rather than striving toward a physical reduction in New Zealand's gross carbon emissions. The CCC has expressed that employing forestry as the primary mechanism for CO<sub>2</sub> removal is a temporary fix rather than a sustainable long-term solution. The CCC view is that continued adherence to the quick-fix model will ultimately place our economy at a competitive disadvantage in an increasingly decarbonised world.

The CCC was established by the government to conduct analysis, critique climate change policy and make recommendations. Given the government has accepted all recommendations by the CCC to date, it appears likely that the recommendations will be adopted - either partially, or in full. The following sections provide an overview of the recommended changes to the pricing mechanisms of the ETS.

## Auction volume and reserve price

At present, account holders in the ETS can 'bank' NZU's which has resulted in a significant stockpile of units accumulating in private accounts. As of 1 June 2022, there were 144 million units held in private accounts, approximately four times what was surrendered by liable entities in 2021. The surplus volume of NZU's in the market presents a material risk that the ETS will fail to achieve the emissions target budget. The CCC has proposed that the government address this surplus through a reduction in auction supply, and alterations in the cost containment reserve (CCR).

The CCC has forecasted that of this stockpile, there is currently a surplus of 49 million banked NZU's held in private accounts. Due to this, the CCC has proposed that auction unit supply should be restricted from 2023-2026. The CCC has proposed that auction volumes should be reduced by an equal portion of the NZ ETS cap each year, ensuring that the surplus reduction remains the same proportion as the cap (25% each year).

As well as reducing supply, the CCC has recommended that the auction reserve price should be elevated materially above current levels. The auction reserve price (ARP) is the price floor that the government is unwilling to sell NZU's below at a quarterly auction. The reserve price was set as a safeguard to limit downward market price pressure that would hinder the ETS's ability for meeting the government's target emissions budgets. Although the ARP does not mitigate prices declining below this level in the secondary market, it prevents the market being flooded with excess supply when prices are deemed too low to assist in achieving the target emissions budgets. Given that the price of NZU's has traded well above the ARP, both in the secondary market and at auction, the CCC sees the current level as inadequately addressing the risk of potential market oversupply.

Million units	2022	2023	2024	2025	2026	2027
<b>Current auction volume</b>	19.3	18.6	18.0	16.5	15.0	-
<b>Proposed auction volume</b>	-	16.3	15.6	14.0	12.2	10.4
<b>Current reserve price</b>	\$30.00	\$32.10	\$34.35	\$36.75	\$39.32	-
<b>Proposed reserve price</b>	-	\$60.00	\$64.00	\$68.00	\$71.00	\$75.00

*Current reserve price is calculated at \$30 in 2022, rising at 5% p.a. Proposed reserve price is set at \$70 in 2030 and discounted back to 2023 at 3% p.a. The final proposed prices are adjusted for inflation according to treasury forecasts.*

## The cost containment reserve

The CCR is a price control mechanism that limits the upside price impact of excess demand for NZU's at the quarterly auctions. If the trigger price of the cost containment reserve is struck, an additional reserve of units is released for purchase. When the CCR was implemented, the government specified its role to be a 'safety valve to reduce the risk of extremely high NZU price in the ETS. The CCR was designed to be triggered rarely, if at all. However, auction prices have exceeded the CCR at four of the last seven auctions, providing an additional 14 million units into the market across both 2021 and 2022. The additional banked units present a material risk of the ETS not achieving the government's specified emission budget targets. The CCC concludes that there is a market expectation that emission prices will increase materially over the coming years and that the current settings of the CCR fall below these expectations. This conclusion was based upon:

- Market confidence that the government will increase stringency surrounding climate change policy
- The material increase in offshore ETS prices has added a bullish aspect to domestic market expectations
- Regulatory uncertainty with frequent changes to the ETS increasing liable entities risk adversity

The CCC has recommended that the structure of the CCR and trigger prices should be changed. It recommends the CCR trigger price for releasing reserve units should increase from \$78.4 per unit in 2023 to two dual triggers of \$171 and \$214 per unit. The two tiers of prices and reserve volumes will still limit extreme upside risk to prices while reducing the anchoring effect of a single trigger price on market participants' price expectations. The dual triggers are designed to act as 'speed bumps' and slow material price increases in periods of excess demand.

When determining the proposed tier reserve volumes, the CCC determined there are approximately 49 million surplus NZU's in the current market, and the reduction in CCR volume should be equal to the annual surplus reduction volume. As such, it has recommended setting the tier 1 reserve volume as sufficient to meet the demand gap between the ETS cap and forecasted emissions under current policies. This demand gap estimate will be revised each year at the government's annual consultation of the ETS, suggesting a risk of these figures differing materially over time. The second tier contains the remainder of the surplus reduction volume.



Million units	2022	2023	2024	2025	2026	2027
<b>Current trigger price</b>	\$70.00	\$78.40	\$87.81	\$98.34	\$110.15	-
<b>Current reserve volume</b>	7.0	7.0	7.0	6.8	6.7	-
<b>Proposed reserve volume</b>	-	8.0	7.7	7.2	6.5	5.9
<b>Tier 1</b>						
<b>Proposed trigger price</b>	-	\$171	\$182	\$193	\$203	\$214
<b>Proposed reserve volume</b>	-	2.9	2.8	2.6	2.3	2.1
<b>Tier 2</b>						
<b>Proposed trigger price</b>	-	\$214	\$228	\$241	\$254	\$268
<b>Proposed reserve volume</b>	-	5.1	4.9	4.6	4.2	3.8

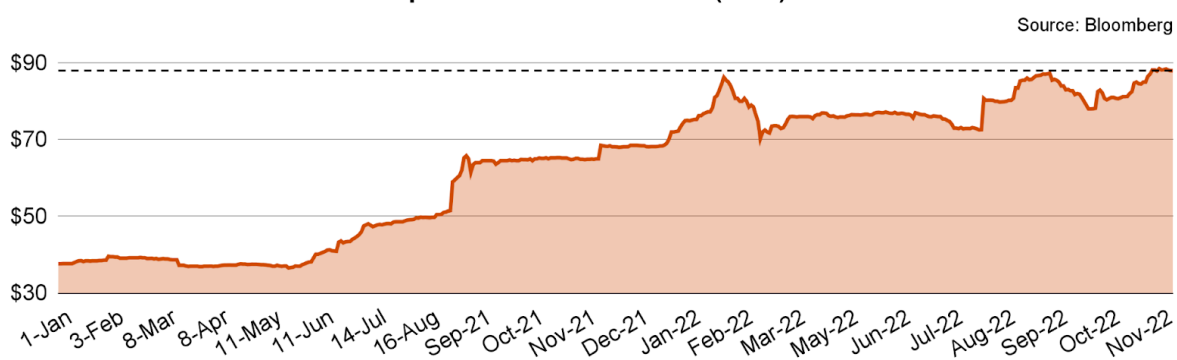
The proposed trigger prices for tier 1 and 2 are set based on \$200 and \$250 in 2030 and discounted back to 2023 at 3% p.a. The final figures are adjusted for inflation according to treasury forecasts.

## Market dynamics

There are currently 4.825 million NZU's available at December's auction as this year's allocation of the CCR has already been exhausted. Given that 10.5 and 6 million NZU's traded hands at the March and June auctions (respectively), and even allowing for advanced purchases, the lack of a CCR is already likely to apply upwards pressure in the spot market for the remainder of 2022. That pressure will be increased should CCC recommendations be embraced.

Under current legislation, units do not have to be delivered until May. March auctions (with a refreshed yearly CCR) have historically served as an opportunity for liable entities to square shortfalls in units. If the CCC recommendations are accepted, auction supply will fall from 4.825 to 4.075 million units at the March 2023 auction, with significantly higher tier one and tier two trigger prices. Liable entities would generally expect close to 12 million units of supply in the March auction, however this would be restricted to 4.075 in absence of a near-market trigger price for the CCR. As corporate managers adapt to the evolving market dynamics, price volatility and unit price increases will demand sensible carbon management policies and proactive strategy implementation.

### Spot New Zealand Units (NZU)



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